









# NAVAL POSTGRADUATE SCHOOL

## Monterey, California



# THESIS

F-76

A PROPOSAL TO CHANGE THE  
FEDERAL ACQUISITION REGULATION:  
RECOGNIZING THE AWARD FEE INCENTIVE  
IN FIXED-PRICE CONTRACTS

by

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June 1989

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should be sanctioned by recognizing it as specific contract forms in both Fixed-price and Cost-reimbursement contracting.



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A Proposal to Change the Federal Acquisition Regulation:  
Recognizing the Award Fee Incentive in Fixed-Price Contracts

by

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## I. INTRODUCTION

### A. GENERAL

When the Federal Government has a requirement for a good or service, it contracts with individuals or industry with the understanding that these goods or services will be of high quality and reasonable cost. The manner in which these items or services are procured within the Executive Branch of the Federal Government is stipulated in the Federal Acquisition Regulation (FAR).

The Federal Acquisition Regulation System is established for the codification and publication of uniform policies and procedures for acquisition by all executive agencies. [Ref. 1]

The FAR also defines the types of contracts authorized for use by the Federal Government, and classifies them into two basic types: Fixed-Price and Cost-Reimbursement. Within these two classifications there are various sub-categories.

Fixed-Price contracts, "provide for a firm price or, in appropriate cases, an adjustable price." [Ref. 1:sec. 16.201] Under Fixed-Price contract types, the contractor assumes primary responsibility for financial risk. The types of Fixed-Price contracts referenced in the FAR are:

- (1) Firm-Fixed-Price (FFP).
- (2) Fixed-Price with Redetermination (FPR).

(3) Fixed-Price-Incentive (FPI).

(4) Fixed-Price with Economic Price Adjustment (FPE).

All fixed price contracts, except the FFP, include incentives or adjustments to accommodate various types and levels of uncertainty or risk involved, most commonly regarding time and the economy.

Cost-Reimbursement contracts "provide for payment of allowable incurred cost, to the extent prescribed in the contract." [Ref. 1:sec. 16.301] In contrast to the Fixed-Price contracts, Cost-type contracts pass the bulk of financial risk to the Government. The Government reimburses the contractor for allowable costs up to the cost ceiling of the contract. These contracts are referenced in the FAR as:

(1) Cost-Plus-Incentive-Fee (CPIF).

(2) Cost-Plus-Award-FEE (CPAF).

(3) Cost-Plus-Fixed-Fee (CPFF).

Selection of the appropriate contract type is one of the most important decisions a contracting officer must make to ensure that the Government obtains the desired end item at a reasonable cost. If chosen correctly, the contract type can also motivate the contractor to perform as desired, specifically influencing cost control, delivery, and quality of the end item. The contracting officer must determine which contract type will best serve the Government's interest and at the same time incentivize the contractor to perform in an

acceptable manner. The FAR provides the contracting officer with the following points to consider when making this choice.

1. Price Competition

Whenever possible, procurement actions should be competed. Competition normally facilitates achievement of reasonable prices, especially if a fixed-price contract can be used.

2. Price Analysis

Price analysis is the process by which the contracting officer analyzes proposed prices to determine whether the price offered is reasonable. It includes comparing proposed prices with such things as historical prices, market prices, and other competitive quotes.

3. Cost Analysis

Cost analysis involves the evaluation of an offeror's cost or pricing data. These data are analyzed to determine the allowability and allocability of costs and the basis of the cost estimates.

4. Type and Complexity of the Requirement

Here the contracting officer assesses the degree of risk assumed by both parties. The more complex and uncertain the requirement, the greater the risk that will probably be accepted by the Government.

5. Urgency of the Requirement

If the item or service is required on an accelerated basis the Government may need to give the contractor

incentives to meet the desired delivery schedule or assume a greater portion of the cost risk of the contract.

6. Period of Performance or Length of Production Run

The contracting officer should consider economic conditions, possibly allowing for periodic reviews to assess possible economic fluctuations during contract performance.

7. Contractor's Technical Capability and Financial Responsibility

An offeror's technical performance capability and financial health must be established by the contracting officer prior to contract award.

8. Adequacy of the Contractor's Accounting System

The contractor's accounting system must be capable of accurately reflecting all cost data relevant to the contract.

9. Concurrent Contracts

If the offeror holds other Government contracts, the contracting officer must determine what impact these contracts will have on the proposed contract.

10. Extent and Nature of Proposed Subcontracting

If an offeror proposes subcontracting much of the work, the contracting officer should assess and consider the degree of risk being assumed by the prime contractor when selecting the appropriate contract type.

Recognizing that the contract types listed do not cover every situation, the FAR also permits the use of hybrid contracts in which characteristics of more than one contract



type are combined. However, the FAR states that the use of hybrid contracts applies only to negotiated contracts and that the use of sealed bidding must result in either a FFP or FPE contract.

✓ A major concern of the Federal Acquisition Policy is obtaining a quality product at a "fair and reasonable price," while still motivating the contractor to perform. Yet in the majority of Government contracts, the costs and profit/fee to be paid to the contractor are determined at contract award, essentially leaving the Government few or no options with which to motivate the contractor during performance.

Of all the identified types of contracts in the FAR, only one uses "after-the-fact" fee determination in appraising a contractor's performance: the award fee contract. However, the FAR only discusses the award fee in the context of cost-reimbursement contracts. Because the FAR limits its discussion to this area, the question arises--Should the award fee be limited to cost type contracts or can this approach be used in Fixed-Price contracts as well? This thesis will explore the possibility of this expanded use of the award fee.

## B. RESEARCH OBJECTIVES

The objectives of the research are:

- (1) to determine if a new contract type should be recognized by the FAR, one that combines the characteristics of a fixed-price contract with an award-fee, called a Fixed-Price-Award-Fee contract.
- (2) to determine the uses and limitations of this hybrid contract type.

- (3) to explain why it should be recognized as a separate contract type rather than merely a hybrid.

#### C. RESEARCH QUESTIONS

Given the preceding general and specific objectives, the following primary research question was posed: Is the award fee concept applicable to a Fixed-Price type contract?

Secondary research questions were deemed pertinent in addressing the basic question. They are:

- (1) What is an award fee incentive?
- (2) When would a Fixed-Price-Award-Fee contract be used in Federal procurement?
- (3) What are the advantages and disadvantages of a Fixed-price-award-fee contract?
- (4) What changes would be necessary in the FAR in order to recognize a Fixed-price-award-fee contract type?

#### D. SCOPE

The main thrust of this thesis focuses on determining the circumstances under which a FPAF contract could be recognized in the FAR. The analysis will also explain when it should be used, including a discussion of its advantages and limitations. The thrust of this research is to determine the usefulness of this contract type in the Federal Government. One of the secondary goals of this research is to describe the uniqueness of the award fee contract in its "after-the-fact," subjective determination of the fee payable to a contractor.

## E. METHODOLOGY

To answer the primary and secondary research questions, two research techniques were employed. First, a comprehensive search of available literature dealing with incentive and award fee contracting, contractor motivation, and motivation theory was conducted. Second, interviews with various personnel in the policy sections of several Executive Federal Agencies were conducted. These included interviews with individuals in contracting, program offices, and other acquisition personnel that it was believed would contribute to this study. A list of the people interviewed appears in Appendix A of this thesis, and a list of the general interview questions appears in Appendix B.

## E. LIMITATIONS

The major limitation to this study was the lack of specific data on the topic. The FPAF contract type has been used on only a limited basis. However, the researcher believes that the data are sufficient to support the study's conclusions and recommendations and the answers to the research questions.

## G. ASSUMPTIONS

This study assumes that the reader commands a general knowledge or basic familiarity with Federal contracting language and the Federal acquisition process. It is further assumed that the reader is aware of the relationship that

exists between industry and the Federal Government in contracting methodology.

#### H. ORGANIZATION OF THE REPORT

The research is organized in the following manner: Chapter I contains the introduction and research questions to be analyzed. Chapter II contains some basic background information on and definition of contract types recognized in the FAR and a brief discussion on incentive contracting in general. Chapter III discusses the Award Fee Concept, history, theory, structure and general characteristics. Chapter IV outlines the Fixed-Price-Award-Fee Contract along with the uses of this type of contract, and how it could be incorporated into the FAR. Chapter V provides conclusions derived from the research, and recommendations on the use of the Fixed-Price-Award-Fee contract by Federal Agencies.

## II. BACKGROUND

### A. INTRODUCTION

The Federal Acquisition Regulation (FAR) outlines various contract types and their general applicability based on the procurement situation and/or complexity of the supplies or services being procured. These contract types are categorized based on the degree of cost risk assumed by the Government and the contractor. They range from Firm-Fixed-Price, which places the greatest cost risk on the contractor, to Cost-Plus-Fixed-Fee, which places the greatest risk on the Government. All other contract types fall between these two extremes and can be described as incentive or adjustable contracts. This chapter will first briefly describe each contract type delineated in the FAR, and second define incentive contracts, including the award fee incentive.

### B. FIRM-FIXED-PRICE

This type of contract "locks-in" the price of the product or service at time of contract award and does not allow any adjustment in contract price, except as may be allowed by specific contract clauses incorporated into the contract. As discussed earlier, this type of contract places the burden of cost risk on the contractor and "provides maximum incentive for the contractor to control costs and perform effectively"



and impose a minimum administrative burden upon the contracting parties." [Ref. 1:sec. 16.202-1]

Use of the Firm-Fixed-Price (FFP) contract is appropriate when "off-the-shelf" commercial items or supplies or services with clear and definitive specifications are procured, and when "fair and reasonable" prices can be easily determined.

#### C. FIXED-PRICE WITH REDETERMINATION

When a firm price can be determined for only the initial period of time, "but not for subsequent periods of contract performance," [Ref. 1:sec. 16.205-2] use of this contract type is appropriate. There are two types of FPR contracts, one provides for a firm fixed price for a specified period in the contract, the other provides for "prospective redetermination at a stated time or times during performance" [Ref. 1:sec 16.205-1] of the contract.

At a specified point in time, negotiated in the original contract (number of deliverables, calendar days, etc.), discussions will be opened to determine if price redetermination, either upward or downward, is necessary. The contract may also include a ceiling price where suitable and "once established may be adjusted only by operation of contract clauses providing for equitable adjustment or other revision of the contract price under stated circumstances." [Ref. 1:sec. 16.205-2]

The Fixed-Price with Redetermination (FPR) contract cannot be used when use of a FFP or FPI contract would be appropriate, or when the contractor does not have an accounting system adequate for price redetermination.

#### D. FIXED-PRICE WITH ECONOMIC PRICE ADJUSTMENT

If instability exists in the market place, such as in periods of high inflation, this type of contract may be appropriate. There are three types of price adjustments defined in the FAR under this contract type. They are:

- (1) Adjustments based on established prices.
- (2) Adjustments based on actual costs of labor or material.
- (3) Adjustments based on cost indexes of labor or material. [Ref. 1:sec. 16.203-1]

These adjustments can be up to ten percent of the base price of the contract, both upward and downward. The contracting officer determines the base level from which the adjustments will be made.

The negotiated adjustments included in the FPE contract take some of the cost risk away from the contractor. The FPE still holds an advantage for the Government because uncertainties which would otherwise be reflected in a higher contract price can be identified and covered separately by a price adjustment clause. This type of contract is used when the contracting officer determines that it is necessary to protect either the Government or the contractor against significant economic fluctuations.

## E. FIXED-PRICE INCENTIVE CONTRACTS

There are two types of Fixed-Price Incentive (FPI) contracts--Firm Target and Successive Targets. Both provide for adjustments in profit and establishment of final contract price based upon a predetermined formula that relates final contract cost to initial target costs. The basic elements of an FPI contract are:

- (1) Target Cost.
- (2) Target Profit.
- (3) Price Ceiling.
- (4) Share formula(s) for establishing the final profit and price.

Application of this type of contract is appropriate when a FFP contract would not be suitable, such as in operational system development or initial production where some uncertainty exists, making a FFP contract impractical. The profit incentive (positive or negative) is structured to influence the contractor to employ effective cost control and to perform satisfactorily. However, the share formula negotiated in advance allows some of the profit loss or gain to be shared between the Government and contractor, based on the contractor's ability to reach target cost. The price ceiling ensures that if the contractor performs very inefficiently, the Government will never pay more than this negotiated maximum.

#### F. COST-PLUS-INCENTIVE-FEE

This contract type is a cost-reimbursement contract, incorporating a fee adjusted through a formula based on the relationship that total allowable cost bears to target cost. It is similar to the FPI contract, but since it is cost-reimbursable, there is no price ceiling. The target cost, target fee, minimum and maximum fee, and the fee adjustment formula are established at contract award. After performance of the contract, the fee payable to the contractor is determined in accordance with the negotiated formula. The purpose of the CPIF contract is to provide an incentive for the contractor to manage contract costs effectively and thereby achieve the maximum allowable fee.

✓ The CPIF contract is normally used for research and development contracts where cost unknowns are common.

#### G. COST-PLUS-AWARD-FEE

This type of cost-reimbursement contract provides the Government with a method of incorporating incentives into contracts for goods or services that are characterized by subjective performance criteria. These requirements do not lend themselves to the objective measurements that are necessary for structuring incentive contracts. A more detailed explanation of this contract type is provided later in the thesis since it is the award fee that is being applied to fixed price contracts.

#### H. COST-PLUS-FIXED-FEE

The Cost-Plus-Fixed-Fee (CPFF) contract falls at the opposite end of the risk allocation spectrum from the FFP contract. In the CPFF contract, the Government assumes all the cost risk and thus gives the contractor little or no incentive for effective management of costs. This type of contract provides for the payment of a fixed fee to the contractor which, once negotiated, does not vary with the actual cost of the contract. It can only be adjusted as a result of requirements changes to the original terms of the contract. Use of the CPFF contract is normally limited to efforts that may present too great a risk to the contractor to allow use of another cost-reimbursement contract type. Examples of appropriate application of CPFF contracts are: performance of research or preliminary exploration or study in which the level of effort is unknown, and use of a CPIF contract is not sensible.

#### I. INCENTIVE CONTRACTS

The purpose of these types of contracts is to provide an incentive arrangement that motivates a contractor to more efficiently manage contract performance and product quality, thus achieving better cost control. Use of incentive type contracts are by no means a modern innovation in Federal procurement policy. They have been used in one form or



another and in various applications throughout the history of the United States.

Both the Monitor of the Civil War and the Wright brothers' "heavier-than-air machine" were purchased under an incentive contract. The monitor had to float, attain a specified minimum speed, and win its first battle before the contractor was paid. The Wright brothers received a \$5,000 bonus in addition to their \$25,000 contract when their flying machine exceeded the target speed by more than two miles per hour. [Ref. 2]

Use of incentive contracts in Defense contracting became more prevalent in the 1960s. Robert McNamara, then Secretary of Defense, was faced with increasing Congressional interest in Department of Defense procurement policies. Specifically, the lawmakers were concerned with widespread cost growth that characterized DoD contracting at that time. These overruns were attributed to two reasons. First, Congress perceived apparent "gold-plating" by defense contractors. Second, they believed that the CPFF contract, which was predominantly used for procurement of newly developed systems in the Defense Department, provided little, if any, incentive for the contractor to control costs. Secretary McNamara directed the use of incentive contracts as a means of inducing greater contractor effectiveness in controlling and reducing costs. The intent was to reduce the cost of new weapon systems by ten percent.

An <sup>"</sup>incentive<sup>"</sup> is defined in the dictionary as: "something inciting to action or effort as the fear of punishment or the

expectation of reward." [Ref. 3] In Federal procurement the term incentives are best defined as:

Contractual incentives which establish automatic procedures for measuring specific results of contractor efforts and financially rewarding or penalizing contractors according to pre-determined formulae. [Ref. 4]

✓ All Government contract types provide some incentives, but the degree of the incentive depends upon the specific contract type. Incentives are most commonly associated with FPI, CPIF, and CPAF contracts. According to the FAR, the specific purposes of incentive contracts are:

- (1) Establishing reasonable and attainable targets that are clearly communicated to the contractor; and
- (2) Including appropriate incentive arrangements designed to (i) motivate contractor efforts that might not otherwise be emphasized and (ii) discourage contractor inefficiency and waste. [Ref. 1:sec. 16.401]

✓ Although current acquisition policy would not allow the use of an incentive structure such as the one applied in the Monitor contract, the reason for employing incentives has remained the same--providing the Government with a means to motivate the contractor to achieve a desired outcome, while maintaining a way to protect the Government if performance is not accomplished. Incentives also provide flexibility when the Government cannot quantify or adequately describe the exact supplies or services for which it is contracting.

The primary motivator used in incentive contracting is profit or fee. It may be more appropriately defined as a means by which a contractor can obtain or lose funds depending

upon the company's performance. Although profit is not the only factor that motivates a contractor:

The profit motive is the essence of incentive contracting. Incentive contracts utilize the drive for financial gain under risk conditions by rewarding the contractor through increased profit for attaining cost (and sometimes performance and schedule) levels more beneficial for the Government than expected (target) and by penalizing him through reduced profit for less than (target) expected levels. [Ref. 5]

In applying predetermined, formula driven incentives, the FAR addresses four types of incentives:

(1) ...cost incentives which take the form of a profit or fee adjustment formula and are intended to motivate the contractor to effectively manage costs. [Ref. 1:sec. 16.402-1(a)]

(2) Technical performance incentives [which] may involve a variety of specific characteristics that contribute to the overall performance of the end item. [Ref. 1:sec. 16.402-2(c)] These incentives should be designed to tailor profit or fee to results achieved by the contractor, compared with specific target goals. [Ref. 1:sec: 16.402-2(a)]

(3) Delivery incentives should be considered when improvements from a required delivery schedule is a significant Government objective. [Ref. 1:sec. 16.402-3(a)]

(4) [Multiple incentives which] motivate the contractor to strive for outstanding results in all incentive areas [and] compel trade-off decisions among the incentive areas. [Ref. 1:sec. 16.402-4(a)]

Regardless of the type of incentive used, the FAR requires that "No incentive contract may provide for other incentives without also providing a cost incentive (or constraint)." [Ref. 1:sec. 16.402-1(a)]

The reasons for using incentives in contracting were documented as follows:

(1) Incentives motivate efficient contract management and achievement of a high performance product.

(2) Incentives enable the Government to reward contractors on the basis of demonstrated management ability and product performance.

(3) Incentives assign to the contractor a larger portion of contract risk than he would bear with a CPFF contract.

(4) Incentives provide explicit communication of the Government's contracting objectives. [Ref. 6]

Basically, incentive contracts fall into two categories--incentive fee and award fee. The use of the incentive contract types, Fixed-Price-Incentive and Cost-Plus-Incentive are limited to objectively measurable performance areas that; "allocate 'bonus' fees or penalties automatically on the basis of a contractor's measured achievement of predetermined quantitative cost, performance, or schedule criteria." [Ref. 7]. Thus the basic incentive contract is objective in the manner in which it influences contractor performance. The basis of determining final profit is established at the time of contract award, in advance of performance. In an award fee incentive structure, the total additional profit or fee available is also established at the time of contract award. However, the award fee incentive allows for subjective, after-the-fact evaluations to determine the amount of fee or profit earned. Therefore, it has the potential to have more of an influence on contractor performance.



### III. THE AWARD FEE CONCEPT

#### A. HISTORY

Even though the objective nature of incentive contracting is designed to motivate a contractor, once the contract is awarded, the Government has no means of redirecting the contractor's efforts if the original incentives were not really a motivation. Therefore, before the introduction of award fee contracting, the Government was still searching for a method that would influence the contractor after award of the contract and that was flexible enough to change as the areas needing attention became important. The solution was a system that would provide a contractor with additional profit or fee during and at the conclusion of the contract performance. This concept was first explored by the Navy and the National Aeronautics and Space Administration (NASA) in 1962.

The after-the-fact award fee contracting alternative resulted from painful recognition of problems of uncertainty associated with setting contract performance targets very far in advance of actual performance, from a need for programmatic flexibility in the face of changing situations, and from acknowledgement of the inescapable fact that many aspects of contractor performance important to program outcomes stubbornly resisted quantification and objective assessment. [Ref. 8]

The purpose behind the award fee incentive method is to allow the Government to reward a contractor based on actual contract performance. It is designed to be a flexible management tool

through which the Government can communicate its approval or disapproval of contractor progress, management, and cost control. The importance the Government places on each evaluation criterion is allowed to change during contract performance as the Government sees a need for increased attention in a specific area.

The first award fee contracts were issued in the early 1960s, and were granted conditional approval for use in 1963. The concept finally gained formal approval and was recognized in the Armed Services Procurement Regulation (ASPR) in 1968 as a sub-category of cost-reimbursement type contracts. The FAR currently describes the award fee concept as:

...an award amount that the contractor may earn in whole or in part during [contract] performance and that is sufficient to provide motivation for excellence in such areas as quality, timeliness, technical ingenuity, and cost-effective management. [Ref. 1:sec. 16.404-2]

#### B. THE AWARD FEE THEORY

The concern in developing the award fee was how best to ensure that the contractor continued to perform in a manner beneficial to the Government after contract award. At the time of contract award, the contractual relationship is established and, hopefully, there will be no difficulty in the fulfillment of the contractual obligation. However, once a contract is awarded, the contractor is free to proceed as necessary as long as the measurable requirements of the



contract are met and all costs incurred are reasonable, allowable, and allocable under a cost-reimbursable contract.

Yet, there are some goods and services procured by the Government that are not easily evaluated using only objective, measurable performance standards. The Government was still concerned that traditional contract incentives did not extend to non-measurable aspects of contract performance and could not be adjusted after contract award. In establishing the award fee incentive, the Government's intent was to introduce a set of subjective evaluation criteria tied to a pool of funds, in addition to base fee or profit, that could be allotted to a contractor for performance that exceeded quantifiable contract requirements in the areas identified by the criteria. It was designed to ensure that periodic performance evaluations were conducted by both buyer and supplier, satisfying the Government's desire to focus increased and continued management attention after contract award, and encouraging more direct and frequent communication between the two parties.

Currently, use of an award fee is recognized in the FAR only as part of a cost-reimbursement contract called Cost-Plus-Award-Fee (CPAF). Should the application of this incentive structure be limited to cost-reimbursement contracts or can its application be appropriately extended to fixed-price contracts?

Fixed-price contracts are used when any uncertainties associated with contract performance are few or small enough not to impact upon the contractor's ability to deliver the required product or perform the required service. [Ref. 9] This application includes contracts in which the Government's emphasis is on such things as quality, meeting supportability goals, and other special requirements like leader-follower. This means that the appropriate application of fixed-price contracts covers situations involving both objective and subjective performance evaluation. Since the award fee allows the Government to better motivate contractors in their performance of subjective criteria, it follows that the use of an award fee could enhance contractor performance under some fixed price contracts.

✓ The Award Fee is best applied when the Government's requirements cannot be objectively detailed in the contract specifications. In the opinion of Raymond Hunt of State University of New York, Buffalo, this incentive tool, "comes closer to fulfilling the principle that profits should be earned, not awarded in advance" [Ref. 10] than any other Government contract incentive.

#### C. THE AWARD FEE STRUCTURE

The FAR prescribes three basic elements that must be included in any contract using an award fee incentive. These elements are (1) a base fee, (2) an award fee, and (3) the

evaluation criteria used to determine contractor performance and relate that performance to an amount of award fee earned during established evaluation periods. The evaluation criteria and periods are stated in the Request for Proposal (RFP), in the actual contract, and, if used, in the Award Fee Evaluation Plan.

1. Base or Fixed Fee

A base or fixed fee is established at the time of contract award. There is no established limit on the range of the base fee in the FAR, but, the Department of Defense Federal Acquisition Regulation Supplement (DFARS) limits the base fee to a range between zero and three percent of the estimated costs of the contract [Ref. 11], while the Department of Energy (DoE) limits the base fee to "50 percent of the maximum allowable CPFF fee or the fee developed using the weighted guidelines method, whichever is applicable." [Ref. 12] Whichever agency directive is use, however, the combination of award fee and base fee cannot exceed the "maximum limits" of fee payable as stated in the FAR. When used, the base fee rate should not be so high that the portion remaining for the award fee pool is too small to influence contractor performance. This base fee is calculated as a percentage of the target contract cost at the time of award. The base fee;

...is designed to compensate the contractor for profit evaluation factors such as risk, investment, and the nature

of the work to be performed, but in an amount commensurate with the minimum acceptable performance. [Ref. 9:p. 1-25]

As the base fee is reduced, the award fee can be increased, and so have a greater impact on the contractor's performance.

## 2. Award or Variable Fee

An award or variable fee is also established at contract award in the form of a pool that can be used by the Government to pay profit or fee to the contractor above that established in the base fee. The difference between the base fee and maximum fee is the award fee pool. The amount of funds available in the "pool" should be high enough to maintain the contractor's management attention throughout the period of contract performance. The amount of the award fee payment, which may be earned in whole, part, or not at all, will be determined by the criteria established by the evaluation standards in the contract. Limitation on use of the award fee pool is determined by agency regulation or directive.

## 3. Evaluation Periods and Criteria

Evaluation periods and criteria that are used to appraise the contractor must be delineated in the contract [Ref. 1:sec. 16.404(b)(2)]. Determining the criteria by which to measure a contractor's performance is a function of the contracting agency and will vary among contracts, but should not be a negotiable item in the procurement process. Although



the FAR provides no strict guidance on what these criteria should be, they generally consist of;

- (1) quality of contractor's output.
- (2) management of the contract requirements.
- (3) cost control (in cost-reimbursement contracts).
- (4) quality of contractor's performance.

Whatever criteria are used, they should always be a fair and reasonable measure of satisfactory contract performance. The contractor must understand the evaluation criteria and that the weights assigned to these criteria may change during the course of contract performance. The contract must also state the number of evaluation periods that will occur and the intervals between these periods.

The above elements are required to be stated in the contract but the organization, methodology, and authority of the individuals used to determine the award fee are not. To enhance the award fee process, an Award Fee Evaluation Plan (AFP), although not specifically required by the FAR, may be used to delineate the evaluation criteria, award fee payment plan, and the organization and procedures of the award fee determination officials. The purpose of this plan is to establish the organization and responsibility of those individuals assigned to determine the award fee. Although it is not required, including the evaluation plan not only allows a prospective contractor to review and compare his control systems against the evaluation criteria, it also ensures that

the contractor understands the award fee determination criteria. The AFP also identifies the Award Fee Determination Official (ADO) (sometimes referred to as the Fee Determination Official (FDO)), the organization of the Performance Evaluation Board (PEB) if used, the Performance Monitors (PM), and the Award Fee Payment Plan. [Refs. 10;13]

The FDO is the member responsible for approving and authorizing payment of any award fee earned during an evaluation period. He is also responsible for approving any changes to the evaluation plan during contract performance. [Ref. 14]

A PEB may or may not be formed depending on the determination of the contracting agency and the complexity and dollar value of the contract. Membership and organization of the PEB is also determined by the contracting activity, but at a minimum should include the Program Manager, Contracting Officer, and legal counsel. Members should be appointed in writing and trained on the responsibilities of the PEB. The purpose of the PEB is to evaluate a contractor's performance based on reports received from the PM's. The PEB will determine the performance grade and recommend the award fee amount to the FDO. [Ref. 14:p. 34]

Individuals assigned as PM's should be familiar with the contractor and work in close proximity to the place of contract performance. A PM must also be trained on the purpose and use of both the award fee and evaluation criteria



used to judge a contractor's performance. This training is crucial to ensure that the PM's understand their role in holding the contractor to the contract requirements without expecting unreasonable performance standards. There should be enough PM's assigned to ensure that the contractor receives a comprehensive evaluation. [Ref. 14:p. 34]

An award fee payment plan which is based on the evaluation criteria established in the contract may also be included. One of the elements of this plan will be to state whether any portion of the award fee unearned during one evaluation period will be carried forward to the next period.

The amount of the award fee to be paid is determined by the Government's judgmental evaluation of the contractor's performance in terms of the criteria stated in the contract. This determination is made unilaterally by the Government and is not subject to the Disputes Clause. [Ref. 1:sec. 16.404-2(a)]

Whether the contract is competitively awarded or sole-source negotiated, the structure of the award fee provides feedback to the contractor concerning how well the Government thinks he is performing.

#### ✓ D. CHARACTERISTICS OF THE AWARD FEE CONTRACT

One of the main drawbacks of a CPIF or FPI contract is that they are based on the assumption that profit is a contractor's primary concern and, therefore, the Government's most powerful motivational tool. This assumption ignores the fact that profit is only one of many objectives pursued by Government contractors.

Studies conducted by various organizations have indicated that a contractor's management may be willing to sacrifice profits in the short run in order to:

- (1) gain competitive advantage by engaging in developmental efforts in areas of potential future business,
- ✓ (2) acquire or retain competent personnel in scarce disciplines,
- (3) spread fixed costs over a substantially broader base,
- (4) prevent a potential competitor from gaining entry to the market,
- (5) gain carry-over benefits to their commercial business (commercial spinoffs),
- (6) improve their opportunity for follow-on Defense contracts, or
- (7) satisfy shareholders by demonstrating the firm's potential for future growth. [Ref. 6:pp. 8-9]

✓ Another problem with the CPIF and FPI contracts is they assume that once the contract has been awarded, the contractor will strive to reduce costs in order to maximize his share of any cost savings based upon the predetermined share formula. However, contractor's do not always respond to these cost reduction incentives as the Government expects. One of the reasons for this apparently poor business judgment is that the initial profit or fee is calculated as a percentage of estimated costs. Therefore, the higher the contractor can raise his estimated costs, the higher will be his profit or fee. If a contractor bases cost estimates on actual cost history, the Government's profit calculation method may encourage inefficient, high-cost practices. This disincentive

for efficiency will be especially pronounced if the contractor anticipates follow-on contracts for the same item. The costs and profit or fee negotiated on these future contracts will more than likely have some basis in actual cost history.

A second reason for cost over-runs in spite of incentive arrangements is that Government contracts are often plagued with numerous changes. Each change carries with it a new set of negotiated costs and profit. If the changes are large and frequent enough, they will eventually frustrate the original objectives of the incentive.

Yet another problem with these incentives is that the informal incentive implies that, if actual costs are substantially different than estimates, it is better to have a cost overrun than a cost underrun. Large cost underruns suggest that Government contracting officials did not negotiate a reasonable price and may cause Congress to reduce funding for the same or a similar requirement in the future.  
[Ref. 15]

The award fee structure attempts to overcome the weaknesses of the other types of incentive contracts. In contrast to the FPI and CPIF contract types, the amount of fee awarded is dependent upon the quality of a contractor's performance during the period between contract award and contract completion. Perhaps the greatest benefit of the award fee is that it requires continual attention to contract management by both the Government and the contractor. For the

Government this means the Program Manager and Contracting Officer must be actively involved in evaluating a contractor's performance and cannot "pass the buck" to an Administrative Contracting Officer. If the contractor desires to earn the award fee, he must maintain active management involvement in the program.

Certainly the characteristic that most sets award fee contracting apart from other types of contracts is that the award fee is not subject to the Disputes Clause required in all Government contracts. That is, once the FDO determines the award fee amount, the contractor cannot dispute either the FDO's decision or the amount of fee paid. In particular, the FAR requires that a clause be placed in an award fee contract that "Expressly excludes from the operation of the Disputes clause any disagreement by the contractor concerning the amount of the award fee." [Ref. 1:sec. 16.405(e)(3)] Although no reason for this exclusion is detailed in any Government regulation, the researcher believes that the award fee is not subject to Dispute because it is awarded based on a subjective, after-the-fact evaluation of the contractor's performance. This evaluation is based strictly on judgment, and it would be difficult to prove the validity of the award using normal rules of evidence.

The second most distinguishing characteristic of an award fee is that it is based upon the Government's judgment of a contractor's actual performance rather than the anticipation



of future performance that characterizes the other types of incentive contracts.

Another characteristic that sets the award fee apart is that the performance and evaluation criteria can be modified during contract performance. This gives the Government the ability to respond quickly to unanticipated problems arising during performance.

There are also disadvantages associated with award fee contracting that must be considered when contemplating the use of this contract type. Perhaps the biggest disadvantage is the administration expense. In addressing the limitations of a CPAF contract the FAR stipulates that, "The contract amount, performance period and expected benefits are sufficient to warrant the additional administration effort and cost involved." [Ref. 1:sec. 16.404-2(c)(3)]

The administrative undertaking involves the time and effort necessary to effectively monitor the contractor. This includes the proper training of all Government evaluators and officials involved in the award fee process as well as the actual devotion of these resources during performance. Evaluations must be timely and detailed enough to allow the Government to provide effective feedback to the contractor.

Since the award fee amount is determined based on anticipated contract cost, the pool of funds available must be fully funded at the time of contract award. If it is not, it may send a signal to the contractor and the Government

evaluators that the reduced amount is the maximum amount the contractor will be awarded. This will act as a disincentive to the contractor.

Finally, collusion and biased evaluation of the contractor by Government personnel involved in this process is a possibility when an award fee is used. This problem can be corrected by documenting all the steps in the evaluation process and stipulating in writing the reasons for these decisions. All these factors must be weighed when considering use of an award fee.

In summary, use of an award fee in contracting accomplishes the following:

- (1) Encourages close cooperation between the Government and the contractor. This is especially important when the program under contract is characterized by uncertainty and is not easily described in detail.
- (2) Ensures that the Government will be able to actively influence contractor performance after award. Because the amount of fee awarded depends on actual, not anticipated, performance, Government managers are better able to hold the contractor's attention.
- (3) Acknowledges that the contractor's upper level management cannot control company operations at the lowest levels. Their influence is limited to more general oversight.
- (4) Encourages formal and informal communication within the organizations of the contractor and the Government as well as between the contractor and the Government.
- (5) Acknowledges that, as discussed earlier, the contractor has many objectives besides increased profits and so can be motivated by a variety of factors.
- (6) Allows the contractor to manage and motivate his employees as he chooses, avoiding imposition of unnecessary and extreme Government oversight.



- (7) Recognizes that conditions during contract performance are constantly changing. The many and varied problems that arise require continuous management attention if successful performance is to be achieved.
- (8) Gives the Government flexibility in its determination of the contractor's effectiveness, allowing the introduction of judgment into the evaluation process rather than relying strictly on mathematical formulae.
- (9) Lends itself to control of contract requirements that cannot be measured objectively or are not defined in great detail.
- (10) Allows the Government to periodically adjust the importance it places on each criterion and to evaluate the contractor's effectiveness in satisfying these criteria.
- (11) Ensures that contract profits are based on actual performance rather than anticipated performance. [Ref. 7:pp. 589-590]

Unlike the objective incentives which tend to focus unduly on measurable, quantitative factors, the award fee incentive leans toward qualitative, organization, and power-behavioral factors which so often determine the successful completion of a contract.

#### IV. THE FIXED-PRICE-AWARD-FEE CONTRACT

##### A. PROBLEMS OF USING FIXED-PRICE-AWARD-FEE AS A HYBRID CONTRACT

###### 1. Non-Recognition by the Federal Acquisition Regulation

The Fixed-Price-Award-Fee (FPAF) contract is not recognized as a specific contract type by the Federal Acquisition Regulation (FAR). Use of the FPAF is currently limited to hybrid contracts. Hybrid contracts are formed by combining one or more contract types recognized in the FAR into a single contract. The researcher discovered that some Federal Agencies do not believe that hybrid contracts are authorized, therefore, further supporting the need for recognizing the FPAF contract as a legitimate contract type.

The researcher interviewed individuals in several Federal Agencies. Through these interviews it became apparent that there exist two perspectives on the use of hybrid contracts in the Government. They are:

(1) Use of any contract type, or variation, is authorized for use in any Federal procurement action provided it will benefit the Government's objective. Characteristics associated with a particular contract can be combined with other contract types for the procurement of supplies or services. Approval authority for use of a hybrid contract rests with the head of the contracting activity.

(2) Use of only those contract types specified in the FAR are authorized for use in Federal Procurement actions. Using a combination of contract structures (hybrids) is not allowed unless approval is granted under a deviation as stated in the FAR. This deviation must be approved by the agency head.

In the researcher's opinion, these two perspectives are a result of the ambiguous wording in FAR, Subpart 16.102(b). This paragraph states:

Contracts negotiated under Part 15 may be of any type or combination of types that will promote the Government's interest, except as restricted in this part. Contract types not described in this regulation shall not be used, except as a deviation under Subpart 1.4. [Ref. 1:sec. 16.102(b)]

Those agencies that interpret the FAR to authorize hybrid contracts focus on the first portion of the paragraph to "promote the Government's interest." However, most of these agencies, with the exception of the Department of Defense (DoD), limit the use of the award fee to Cost-Plus-Award-Fee (CPAF) or other combinations of cost-reimbursement contracts.

Those agencies that do not believe hybrid contracts are authorized interpret the second sentence in the above FAR paragraph to mean that only those contract types specifically described in Part 16 are authorized for use in any Federal Procurement action unless a deviation is granted by the agency head or by individuals designated by the agency head. These agencies and contracting offices were extremely reluctant to use any hybrid contracts.

Based on the interviews conducted by the researcher, an agency's willingness to use CPAF contracts, or for that matter any hybrid contract, depended on the current management policy of that agency. Their interpretation of the FAR determined whether or not agencies would use the award fee in

fixed-price contract actions. Nearly all the individuals interviewed believed the FAR should specifically recognize the award fee incentive in fixed-price contracts. Some indicated that without this recognition, they would not choose a FPAF contract because their agency did not allow use of hybrids.

## 2. Relationship of Fee Limitations to Fixed-Price Contracts

In cost-reimbursement contracts, the FAR limits the amount of fee allowed based on the contract's estimated cost. These are statutory limitations imposed on Cost-Plus-Incentive-Fee and Cost-Plus-Award-Fee contracts by 10 U.S.C. 2306(d) and 41 U.S.C. 254(b). The maximum fee allowed is: (1) 15 percent for "experimental, developmental, or research work," and (2) ten percent for all other work performed under cost-reimbursement contracts unless a deviation is granted by the agency head or his designee. [Ref. 1:sec. 15.903(d)(1)] (One additional restriction applies to both cost-reimbursement and fixed-price contracts which limits fee or profit to six percent of the estimated cost or price of architect-engineering services for public works or utilities.)

The question then is: Do the fee limitations imposed by the FAR for cost-reimbursement contracts apply to award fee incentives when used with fixed-price hybrid contracts?

A review of the available research material revealed that this question has not been addressed. In fact, the



researcher was able to find only three references even remotely related to this question. One recommendation stated:

The maximum fee allowed for a routine project is 10 percent of the contract's estimated cost excluding the award fee [FAR 15.903(d)(1)(iii)]. Although that limit is listed under the CPAF section of the FAR, the FPAF incorporates the award-fee portion of CPAF in order to be a legal combination of contract types as authorized by FAR 16.102(b). [Ref. 16]

Another stated:

There is no specific policy that covers precisely how to handle this issue, especially if "sealed bid" procedures are used; however we can infer from FAR 15.903(d)(iii) that the fee should "not exceed 10% of the contract's estimated cost." [Ref. 14:p. 37]

Yet another opinion was:

Since the award fee is defined by the ASPR as a cost-type contract, it is necessarily subject to the fee limits imposed on such contracts. The Federal Acquisition Regulations (FAR), when issued, are not expected to alter the substance of the ASPR's provisions on the award fee. [Ref. 13:p. 52]

Additionally, none of the agency-specific supplements to the FAR reviewed by the researcher addressed this issue.

Most of the people interviewed agreed that some limit should be placed on the amount of the award fee that may be used in a contract. Their recommendations were similar to those of the above three statements. That is, the award fee pool should be limited to a maximum of ten percent of the estimated price of the contract. This recommendation was based on evidence that the award fee pool does not have to be large to motivate the contractor. [Ref. 16:p. 39]

### 3. Base Profit/Fee

The base fee represents the minimum dollar amount of profit/fee that a contractor may earn. This profit/fee is established to reward a contractor for performing to minimal standards. The FAR does not define an upper limit to base profit/fee when using an award fee incentive, only stating that it may be zero.

In fixed-price contracting the risks associated with the contract shift from the Government to the contractor. However, the FAR does not state that a contractor is guaranteed profit/fee for the services performed under a fixed price contract, but states that a profit/fee incentive, "represents that element of the potential total remuneration that contractors may receive for contract performance over and above allowable costs." [Ref. 1:sec. 15.905] This sentence could be interpreted to indicate that the profit/fee reward may be set at zero.

The FAR also states that profit/fee objectives shall not be restricted to a predetermined range.

With the exception of statutory ceilings in 15.903.(d) on profit and fee, agencies shall not (1) establish administrative ceilings or (2) create administrative procedures that could be represented to contractors as de facto ceilings. [Ref. 1:sec. 15.901(c)]

This sentence clearly states that a contractor's proposed profit/fee goal can not be limited by agency directives and thus, that an agency cannot restrict the amount of profit/fee a contractor may propose for a contract requirement.



The question, then, is: Should base profit be established if an award fee incentive is used with a fixed-price contract? The researcher proposes two possible methods:

- (1) Establish the profit objective as described by the FAR through negotiations or by means of competitive solicitation of the contract requirement. The award fee amount would then be an additional pool separate from the profit objective available to the contractor for above minimal performance.
- (2) Establish the base profit objective described by the FAR through negotiations or by competitive solicitations. Once the objective is determined, negotiate a division of this objective into base profit and award fee.

Whichever method is used, it is clear that an agency cannot require any offeror to bid zero profit/fee on a proposed contract.

#### 4. General Ambiguity of the Award Fee Incentive

The language in the FAR on use of the award fee in cost-reimbursement contracts is nebulous, leaving much interpretation on its use to the individual Federal agencies. In describing the CPAF contract fee application, the FAR outlines the use of award fee as follows:

- (i) The work to be performed is such that it is neither feasible nor effective to devise predetermined objective incentive targets applicable to cost, technical performance, or schedule;
- (ii) The likelihood of meeting acquisition objectives will be enhanced by using a contract that effectively motivates the contractor toward exceptional performance and provides the Government with the flexibility to evaluate both actual performance and the conditions under which it was achieved; and
- (iii) Any additional administrative effort and cost required to monitor and evaluate performance are justified by the expected benefits.

(2) The number of evaluation criteria and the requirements they represent will differ widely among contracts. The criteria and rating plan should motivate the contractor to improve performance in the areas rated, but not at the expense of at least minimum acceptable performance in all other areas.

(3) Cost-plus-award-fee contracts shall provide for evaluation at stated intervals during performance, so that the contractor will periodically be informed of the quality of its performance and the areas in which improvement is expected. Partial payment of fee shall generally correspond to the evaluation periods. This makes effective the incentive which the award fee can create by inducing the contractor to improve poor performance or to continue good performance. [Ref. 1:sec. 16.404-2(1)-(3)]

The FAR does not stipulate how an award fee incentive should be structured. The only requirements are that the contract consist of a base fee, an award fee, evaluation criteria, stated evaluation periods, and an award fee clause that excludes the award fee portion of the contract from the Disputes clause.

The FAR leaves unanswered how to determine the award fee amount, who shall be responsible for authorizing the award fee amount, at what level the contractor's performance will be evaluated, and whether or not the evaluation criteria may be changed during performance of the contract.

Detailed requirements on use and structure of the award fee incentive should be the responsibility of individual agencies. However, in the researcher's view, the FAR should give more detailed guidance in the areas mentioned above.

## B. DEFINITION OF A FIXED-PRICE-AWARD-FEE CONTRACT

A Fixed-Price-Award-Fee contract is a fixed-price contract with an award fee (or profit) provision added. The contractor may earn this fee based on evaluation by the Government of his performance in stated areas judged during execution of the contract. The award fee is designed to reward a contractor for above satisfactory performance. The FPAF contract combines the reduced cost risk of a firm-fixed-price contract with the subjective evaluation techniques of the award fee incentive.

## C. STRUCTURE OF A FIXED-PRICE-AWARD-FEE CONTRACT

### 1. Fixed-Price

This type of contract establishes a firm-fixed-price at contract award. In this regard, it is similar to a FFP contract, placing minimal cost risk on the Government and maximum risk on the contractor. The fixed-price requirement provides an incentive to the contractor to control contract costs. It also provides for easy price comparison when the proposed requirement is competed. The fixed-price provides for less contract administration burden on the Government.  
[Ref. 16:p. 4-4]

### 2. Base Profit

This is included in the fixed-price of the contract. The degree of profit allowed should represent the minimum amount of profit above costs that the contractor is guaranteed

for performing at minimal acceptable standards. The range of the base profit should be determined by each agency's structured approach as recommended in FAR Subpart 15.9. If the contractor has a history of performing at minimum acceptable levels, then a zero base profit may be considered.

The contractor should be allowed consideration for profit in any performance areas of the contract that will not be evaluated under the award fee criteria.

### 3. Award Fee

The method of choosing the appropriate amount of award fee is similar to the method addressed in Cost-Plus-Award-Fee contracts. The award fee amount should be fully funded at the time of contract award. Evaluation periods and criteria must also be stipulated in the contract, and, as in the CPAF contract, the amount of the award fee should be sufficient to maintain the contractor's management attention throughout the performance of the contract.

Use of the award fee, when combined with a base fee in cost-reimbursement contracting, cannot exceed the maximum fee limitations as stipulated in the FAR. However, no limitation applies to the award fee incentive when used in fixed-price contracts. Whichever of the proposed methods is used, the amount of total award fee should be based on the estimated cost of the contract. Any base profit objectives should be excluded in determining the award fee amount.



#### 4. The Award Fee Evaluation and Payment Plan

These criteria should be similar to the evaluation criteria addressed in Chapter III. The only significant difference is that, unlike a cost-reimbursement contract, when using a fixed-price contract, cost control is not normally considered in the evaluation criteria. The level of detailed procedures needed for use of the Award Fee Plan should be determined by each agency.

#### D. CHARACTERISTICS OF A FIXED-PRICE-AWARD-FEE CONTRACT

There are two unique characteristics of an FPAF contract:

(1) fixed-price, and (2) the award fee provision.

##### 1. Fixed Price

The FPAF contract incorporates the features of a firm-fixed-price contract. The costs to the Government are fixed and the contract is easier to administer. The contract places the maximum amount of risk on the contractor and, therefore, provides maximum incentive to control costs.

##### 2. Award Fee

The award fee amount represents an additional pool of funds available to the contractor based upon a unilateral non-disputable evaluation by the Government. The contracting activity establishes the evaluation criteria on which the contractor will be judged. The evaluation and subsequent awards to the contractor, if any, should be based on above



average performance in the areas of quality control, timeliness, and responsiveness.

#### E. USE OF THE TERM "FEE" IN FIXED-PRICE CONTRACTS

No material was found in the research directly concerning this subject. One reference was made to the use of FFP/AF when addressing this contract type. [Ref. 13:p. 52] Those articles reviewed that discussed this subject addressed this contract type as a Fixed-Price-Award-Fee contract. Indeed, during the interviews the author conducted on the research subject, all individuals referred to this contract as FPAF.

In Federal procurement, the term profit is generally associated with fixed-price contracts and fee with cost-reimbursement contracts. The term fee is used in Government procurement to represent an additional monetary reward that a contractor may earn in addition to the estimated cost of a contract. Specifically:

In specified cost-reimbursement pricing arrangements, fee represents an agreed-to amount beyond the initial estimate of costs. In most instances, fee reflects a variety of factors, including risk, and is subject to statutory limitations. Fee may be fixed at the outset of performance, as in a cost-plus-fixed-fee arrangement, or may vary as in a cost-plus-incentive-fee arrangement. [Ref. 9:p. B-5]

The term profit, in procurement, also refers to a monetary amount a contractor may earn that exceeds the contract costs.

Profit is described as:

...the basic motive of business enterprise; on occasion referred to as "wages of risk." In contract pricing, profit represents a projected or known monetary excess realized by a producer or performer after the deduction of cost incurred

or to be incurred in the performance of a job, task, or series of the same. [Ref. 9:p. B-8]

The FAR does not clearly distinguish between the use of these two terms but both are used to describe the same general objective: the additional monetary benefit that may be earned by a contractor when supplying the Government with the required service or product.

Individuals were interviewed concerning changing the term from "fee" to some form of profit when the award fee incentive is used in fixed-price contracting. Their responses are summarized below:

- (1) The award fee incentive is understood by both Government and industry and allows control of subjective evaluation criteria. Changing the term to profit would only confuse the rationale for the parties using this incentive structure.
- (2) Even if the term were changed officially, unofficially this incentive structure would probably still be referred to as an "award fee" incentive.
- (3) If the name is changed, it may require a major change to the FAR.

Few of the individuals interviewed expressed concern about use of the term fee in fixed-price contracting. If a new concept were introduced to the FAR, similar to the award fee, but with a new undefined title, a minor change to the FAR would be difficult to justify. In other words, change of the term "award fee" to some form of profit for use with fixed-price contracts would require a major revision to the FAR. Extension of the award fee concept from fixed-price to cost-reimbursement contracts is far less complicated.

## F. APPLICATION OF THE FIXED-PRICE-AWARD-FEE CONTRACT

The FAR outlines the application of a Cost-plus-award-fee contract when:

(i) The work to be performed is such that it is neither feasible nor effective to devise predetermined objective incentive targets applicable to cost, technical performance, or schedule;

(ii) The likelihood of meeting acquisition objectives will be enhanced by using a contract that effectively motivates the contractor toward exceptional performance and provides the Government with the flexibility to evaluate both actual performance and the conditions under which it was achieved; and

(iii) Any additional administrative effort and cost required to monitor and evaluate performance are justified by the expected benefits. [Ref. 1:sec. 16.404-2(b)(1)]

These guidelines also apply to the FPAF contract. The only difference is that there exists sufficient information, history, and detailed specification that use of a fixed-price contract would be a better contract vehicle for the proposed procurement. There is one additional guideline that should be followed when considering use of a FPAF contract: When the desired performance for the supplies or products cannot be objectively measured or defined as contract-specific, but is still necessary, use of this contract may be used over other fixed-price contract types. There are certain situations in which detailed requirements exist that cannot be objectively specified when defining the contract requirement. Use of an award fee incentive provides the Government with flexibility to motivate a contractor in this area.

Use of FPAF contracts is not new to Federal procurement. Use of the FPAF contract type is currently being used in "services" contracts awarded by Department of Defense component agencies and the Department of the Treasury. This contract type should not be limited to only services contracts. Its flexibility allows for a wide range of applications. FPAF hybrid contracts have been used in construction and hardware contracts, Government-Owned-Contractor-Operated (GOCO) plants and in conjunction with multiple incentive fixed-price contracts. [Refs. 13;16]

This contract type is best utilized in a competitive environment where the contract price is established by the service or product market. It also appears to meet the requirements for sealed bidding procedures provided FAR 14.104 is changed to include this contract type. [Ref. 16:p. 5-2]

The only limitation imposed by the FAR that would apply to a FPAF contract is: "The contract amount, performance period, and expected benefits are sufficient to warrant the additional administrative effort and cost involved." [Ref. 1:sec. 16.404-2(c)(3)] The administration expense is no doubt a major consideration in the use of any award fee incentive. However, the major expense associated with a CPAF contract is the auditing of contract costs. In a FPAF contract, the price is fixed and evaluation of a contractor's cost control should not be an evaluation criterion. If the major concerns from the Government are those previously addressed for use of the



award fee, the Government must be able and willing to support the purpose of the award fee concept.

Use of the FPAF contract is not warranted if adequate and detailed specifications are available and additional emphasis on factors such as quality, performance, and management is not appropriate for the required end item or if the requirement is available in the commercial market.

#### G. ADVANTAGES AND DISADVANTAGES OF A FIXED-PRICE-AWARD-FEE CONTRACT

##### 1. Advantages

There are several advantages to use of a FPAF contract. One of these advantages is the firm-fixed-price aspect of the contract. The contract price for the requirement is locked in at contract award, placing cost control responsibility on the contractor. The contractor is also required to produce an end item or service that is complete and in conformance with minimum acceptable standards in the contract.

Another advantage is the use of the award fee incentive as a motivational tool. It is extremely useful, when properly applied, as a management tool by the Government and by the contractor. The fact that this incentive is in the contract provides the Government with an ability to influence the contractor in the areas described in the contract's evaluation criteria. The contractor is awarded an allocation from the award fee pool based on better-than-average



performance. The better the contractor performs, the larger the reward will be. Conversely, if the contractor performs only to the minimum acceptable levels he should be awarded none of the award fee pool available for the period evaluated. The Government has the flexibility to distribute none, some or all of the award fee to the contractor based upon its unilateral determination without the decision being subject to the Disputes clause in FAR 52.233-1.

Thirdly, the evaluation criteria and subsequent Government evaluations provide direct feedback to the contractor. In this sense it is a "report-card" [Ref. 13:p. 7] on how well the Government views the contractor's response to the evaluated components. If an organization takes pride in its accomplishments, the award fee incentive can be seen as a motivational tool beyond the traditional profit incentive. The contractor may set a goal to achieve as much of the award fee as possible thus establishing a prestigious objective for the organization to accomplish.

One response the researcher received indicated that the contractor's program manager believed he obtained more responsive action from his company's management on a FPAF contract than with any other form of Government contract, including CPAF.

Finally, the flexible nature of the award fee allows management from both Government and the contractor to respond quickly to less than favorable evaluations. It also provides

the Government the ability to emphasise or re-direct emphasis during contract performance without major changes to the contract.

## 2. Disadvantages

As with every contract type described in the FAR, there are advantages and disadvantages associated with each one. This also applies equally to a FPAF contract.

The administrative expense associated with the use of the award fee is often its limiting factor. Use of a FPAF contract requires more active (time) involvement by Government personnel in the award fee application. The expense of this contract type is similar to the administrative expense of a CPAF contract. However, a major portion of the evaluation process is eliminated in the FPAF contract since there is no evaluation of a contractor's cost control. Although this does eliminate one time intensive element of the award fee process it still requires a performance monitor, a performance evaluation board and a Fee Determination Official to contribute the time necessary to properly evaluate the performance elements of the contract. Exactly where the trade-off point is must be determined by the contracting activity, but if the desired outcome warrants the use of the FPAF contract then the administrative expense should not be a limiting factor.

All Government personnel involved in the FPAF process must be thoroughly trained on the intent of the award fee

provision. This includes eliminating biased attitudes that may affect the evaluation process and defining what is above average performance. Care must be exercised to ensure that the Government representatives do not use this added contract incentive to "gold-plate" the contract requirement.

The evaluation process must be timely. Informing a contractor of his performance in an area after the effort has been accomplished defeats the purpose of the award fee incentive. Measures must be taken to ensure that the evaluations are timely, accurate, effectively prepared, fair, and reasonable so that meaningful feedback can be given to the contractor.

The amount of the funds for the award fee pool must be appropriated at the time of contract award. Failure to do so may give mixed signals to both the Government evaluators and the contractor concerning the true value the Government places on this added performance incentive. The award fee amount should be determined based upon the Government's estimate of the proposed requirement. The size of the award fee pool does not have to be large to be effective. [Ref. 17]

#### H. PROCEDURES TO CHANGE THE FEDERAL ACQUISITION REGULATION TO RECOGNIZE THE FIXED-PRICE-AWARD-FEE CONTRACT

##### 1. Changes Required in the FAR

Prior to completion of this thesis, the researcher obtained information that the Defense Acquisition Regulatory Council (DAR) had initially approved a change to the FAR

incorporating the FPAF contract. However, in May 1989 the DAR council rescinded their approval and incorporated a reference to the Department of Defense Federal Acquisition Regulation Supplement (DFARS) to a FPAF contract.

To incorporate a FPAF contract as a recognized contract type, certain sections of the FAR must be modified. Most of the changes will be in FAR Part 16 "Types of Contract." Recognizing the FPAF in the FAR would require only moderate changes and, therefore, would not require prior approval from the Office of Management and Budget (OMB). The proposed changes are provided in Appendix C to the thesis.

## 2. Process to Change the FAR

The process by which changes are submitted, reviewed, and incorporated into the FAR are delineated in Subpart 1.2, "Administration" of the FAR, and Subpart 1.5, "Agency and Public Participation." Maintenance of the FAR is performed by two councils, the Defense Acquisition Regulatory Council (DAR) representing the Defense agencies and NASA, and the Civilian Agency Acquisition Council (CAAC) representing the Civilian agencies of the Executive Branch of the Government. Each council is assigned specific areas of responsibility for maintenance of the FAR. Recommendations to change or amend any section must be submitted to the appropriate council for their review and recommendation. The responsible council then forwards their comments to the other council for their evaluation.



Changes to the FAR are classified into two basic categories: major or minor. A major change to the FAR is described as a change that would result in a significant revision to the regulation. In particular the FAR describes these changes as meaning:

...revisions that alter the substantive meaning of any coverage in the FAR System having a significant cost or administrative impact on contractors or offerors, or a significant effect beyond the internal operating procedures of the issuing agency. [Ref. 1:sec. 1.501-1]

These types of changes to the FAR must be processed within the guidelines of the Regulatory Flexibility Act and the Paperwork Reduction Act. Additionally, public comment must be sought concerning the proposed revision(s) to the regulation.

Minor changes are "editorial, stylistic, or other revisions that have no impact on the basic meaning of the coverage being revised." [Ref. 1:sec. 1.501-1] Minor changes are reviewed similarly to the method used for significant changes except public comment is not normally sought. The proposed changes to the FAR, suggested by the researcher, are provided in Appendix C of this thesis. These proposed changes are considered minor clerical changes with tremendous benefits to the Federal Government. The fundamental meaning of the award fee concept remains the same. The intention of these changes is to clear up the ambiguities concerning use of the award fee incentive and facilitate its application to fixed-price contracts.



## V. CONCLUSIONS AND RECOMMENDATIONS

### A. CONCLUSIONS

The research performed has indicated that a Fixed-price-award-fee (FPAF) contract should be a contract type recognized by the Federal Acquisition Regulation (FAR). As discussed in Chapters II and III, the benefits the Government derives from using an award fee should not be limited to cost-reimbursement contracts.

① All methods employed by the Government to motivate contractors, with the exception of the award fee, require that the Government establish its objective in measurable form at the time of contract award. The award fee is structured to allow the Government to evaluate the contractor during contract performance and to change the emphasis it places on the evaluation criteria. Because of these unique characteristics, the award fee holds many advantages over other methods of contractor motivation. Specifically, the award fee incentive encourages close cooperation between the Government and contractor, improves communications both vertically and horizontally, provides flexibility in Government oversight of contractor performance, recognizes that factors other than profit motivate a contractor, and recognizes that all contract requirements cannot be

specifically detailed and therefore cannot be objectively measured.

The advantages listed above suggest that the Government can derive the greatest benefit from use of the award fee in situations where it is desirable to encourage a contractor for performance over and above that which can be objectively measured and incentivized under other types of contracts. A specific example of the appropriate applications of the award fee is when the quality of the contractor's management of the production process as well as the quality of the end item is important to the Government. Another example is when the Government is concerned with the contractor's responsiveness to changing situations. A third example is when the Government is interested in motivating the contractor to perform above the minimum standards identified in the contract. These examples are certainly not all inclusive. The award fee can be appropriately used in other situations or when a combination of areas of motivation are desired.

Fixed-price contracts are appropriately used when the uncertainty of contract performance is relatively low and, therefore, the contractor is willing to accept all or most of the contract cost risk. Unlike cost-reimbursement contracts which require only the contractor's best efforts for the period in which funds are available for the contract, fixed-price contracts require delivery of the end item or performance of the service. Because fixed-price contracts

involve the least amount of risk for the Government and require delivery or performance, their use is preferred over cost-reimbursement contracts when uncertainties are few and prices can be fairly easily determined. The Government enters into fixed-price-award-fee contracts when there are few performance uncertainties and at the same time the good or service being procured lends itself to subjective rather than objective measurements. Some examples of these situations are support services contracts for such things as janitorial or mess attendant services. In other cases the Government may desire to evaluate the contractor throughout his performance based on the Government's subjective judgment of the quality of that performance. Another example is contracting for construction. In this case, the Government may desire to influence the contractor's compliance with safety requirements or the quality of his construction practices during contract performance. A third example is in leader-follower contracts. In this situation the Government may want to evaluate the cooperation the leader gives to the follower.

The previous examples show that there are situations in Government contracting that appropriately fit the use of fixed-price contracts and, at the same time, lend themselves to award fee incentives. Limiting the use of the award fee to cost-reimbursement contracts restricts the Government's ability to derive the full benefits of the award fee incentive. Allowing appropriate use of the award fee with

fixed-price contracting will enable the Government to take full advantage of this incentive structure. Therefore, in this researcher's view, the award fee incentive should be recognized as being appropriate for use with fixed-price contracts.

## B. RECOMMENDATIONS

The following recommendations are a result of the research in this study.

1. Change the Federal Acquisition Regulation (FAR) to Recognize the Fixed-price-award-fee Contract as a Specific Contract Type

Currently, the use of an award fee in fixed-price contracting is classified as a hybrid contract. In its discussion of hybrids, the language of the FAR is subject to interpretation. Some agencies and procurement offices believe it is automatically authorized when it serves the Government's interest. Others believe use of a hybrid requires submittal of a deviation request to higher authority. This ambiguity inhibits use of the award fee in fixed-price contracts, limiting the Government's ability to derive full benefit from this incentive arrangement. Recognition of the FPAF contract by the FAR would resolve the ambiguity making use of this contract type more acceptable. Implementation of this recommendation requires the approval of both the Defense Acquisition Regulatory Council and the Civilian Agency



Acquisition Council. The specific procedures for changing the FAR were discussed in Chapter IV.H.

2. Establish Award Fee Limitations for Fixed-price-award-Fee Contracts

The FAR provides fee limitations for cost-reimbursement contracts. However, it places no ceiling on the profit that may be awarded under fixed-price contracts. The FAR does not currently provide for the extension of the use of a fee with a fixed-price contract. Therefore, if the FPAF contract were recognized within the delineation of award fee limits, there would be a discontinuity in the FAR. For this reason, it is recommended that an award fee limitation be stipulated in the FAR. The appropriate fee limitation should be established at no greater than ten percent of the estimated contract cost (contract price excluding profit).

3. Base Profit Should Not be a Separate Element of the Fixed-price-award-fee Contract but Should be Included in the Contract

In Cost-plus-award-fee contracts, the FAR stipulates limits for the base fee when an award fee is included in the contract. In fixed-price contracting, the FAR elucidates that the Government cannot limit the profit proposed by a contractor. Rather, the Government must negotiate a reasonable profit which is to be included in the contract price. Further, the FAR indicates that although there is no ceiling on proposed profit, neither must profit always be paid. In other words, profit must be reasonable but can be as



low as zero and has no upper limit. Since the contract being proposed is a fixed-price contract, the profit should be negotiated as it is in any other fixed-price contract. As such it should not be a separate element of the FPAF contract, but should be included in the contract's fixed-price. Of course, when determining the reasonableness of profit awarded, the Government contracting officer should consider that an award fee will also be included in the contract.

4. Provide Detailed Guidance Covering the Structure of Award Fee Incentives in the Federal Acquisition Regulation

Currently, the FAR's discussion of the application of an award fee is vague. It implies that there should be evaluation criteria and indirectly addresses the appropriate limits of base fee, award fee, maximum fee, and evaluation periods. It does not provide detailed guidance in these areas. The FAR should at least delineate the key elements of the award fee structure. At a minimum, this structure should include:

- (1) Award fee available.
- (2) Evaluation criteria.
- (3) Evaluation periods.
- (4) Performance monitors.
- (5) Fee Determination Official.
- (6) Evaluation Board (if dollar value or complexity of contract warrants).

## C. ANSWERS TO RESEARCH QUESTIONS

### 1. Is the Award Fee Concept Applicable to Fixed-Price Type Contracts?

The award fee concept is applicable to fixed-price contracts because these contracts are used to procure goods and services that entail subjective, after-the-fact Government evaluation. Use of the award fee is appropriate to these situations. Additionally, the FAR does not expressly prohibit use of the award fee with fixed-price contracts.

### 2. What is an Award Fee Incentive?

An award fee incentive is an evaluation performed by the Government based upon specified criteria. This evaluation is unilaterally determined by the Government, subjective in nature, performed after contract award, and is not subject to the Disputes clause.

### 3. When Would a Fixed-Price-Award-Fee Contract be Used in Federal Procurement?

Fixed-price-award-fee contracts are appropriately used when two criteria are met. First, a fixed-price contract must be suitable, therefore, contract performance uncertainties must be relatively few and a contract price must be reasonably determinable. Second, use of the award fee must be appropriate. This means that the goods or services procured lend themselves to subjective, after-the-fact evaluation.

4. What Would be the Advantages and Disadvantages of a Fixed-Price-Award-Fee?

The advantages of a FPAF contract are that it promotes cooperation between the Government and the contractor, it improves communication within the organization both vertically and horizontally, it allows flexibility in Government oversight of contractor performance, it recognizes that contractor's are motivated by factors other than profit, and it recognizes that all contract requirements cannot be objectively measured. Also, because it is a fixed-price contract, the contractor bears the cost risk. The disadvantages of the FPAF contract are that it requires a greater devotion of Government personnel to monitor contractor performance. Further, without proper training it holds the potential for abuse by Government personnel due to biased evaluations and attempts to gold-plate the requirement. Also, if deficiencies are not noted in a timely manner the contractor cannot effectively correct these deficiencies.

5. What Changes Would be Necessary in the Federal Acquisition Regulation in Order to Recognize a Fixed-Price-Award-Fee Contract Type?

To recognize the FPAF contract, the FAR would require an additional subpart within Part 16, "Types of Contracts." In addition, various minor changes to other parts would also be necessary. This addition involves no significant changes to the FAR.

#### D. RECOMMENDATIONS FOR FURTHER STUDY

- (1) Cost-benefit analysis be conducted on completed FPAF contracts to ascertain the effectiveness of this contract type in promoting more than minimal contractor performance.
- (2) Analysis of how to determine the effective range of the award fee incentive.
- (3) Evaluation of the process by which the Defense Acquisition Regulatory Council and the Civilian Agency Acquisition Council interact to evaluate recommended changes to the FAR.

## APPENDIX A

### LIST OF PERSONNEL INTERVIEWED

1. Carter, Glenn H., Procurement Analyst, Office of Procurement Management, Department of Commerce, Washington, D.C., Interview, May 1989.
2. Edwards, Larry G., Chief of the Operational Specialized Branch, Tactical Air Command, Tyndall Air Force Base, Florida, Interview, May 1989.
3. Greene, Linda E., Navy Defense Acquisition Council Representative, Office of the Assistant Secretary of the Navy, Shipbuilding and Logistics, Washington, D.C., Interview May 1989.
4. Guenther, Walter, Procurement Analyst, Office of the Secretary of Transportation, Acquisition and Grant Management, Washington, D.C., Interview, May 1989.
5. Leder, Elaine D., Director of Service Contracts Division, Naval Facilities Engineering Command, Western Division, San Bruno, California, Interview, May 1989.
6. Lloyd, Robert, Manager for Policy and Review Programs, Department of the Treasury, Washington, D.C., Interview, May 1989.
7. Lovett, Edward T., Department of Energy representative to the Civilian Agency Acquisition Council and Procurement Analysis, Office of Policy, Department of Energy, Washington, D.C., Interviews, March 1989, May 1989.
8. Maraist, William J., Director of Procurement Policy Division, National Aeronautics and Space Administration, Washington, D.C., Interviews, February 1989, June 1989.
9. Moore, Jerry J., Major, USAF, Contracting Acquisition Management Officer, Office of Secretary of the Air Force/AQCO, Washington, D.C., Interview, May 1989.
10. Muzio, David A., Deputy Associate Administrator for Policy, Office of Federal Procurement Policy, Washington, D.C., Interview, April 1989.



11. Nelson, Loural A., Director of Construction Division, Officer in Charge of Construction, Naval Facilities Engineering Command Contracts, TRIDENT, Kings Bay, Georgia, Interviews, February 1989, March 1989, May 1989.
12. O'Neill, John L., Supervisory Procurement Analyst, Federal Acquisition Regulatory Staff, Washington, D.C., Interview, May 1989.
13. Ratkus, Anthony G. Jr., Contract Specialist, Contract and Acquisition Division, Internal Revenue Service, Washington, D.C., Interview, May 1989.
14. Scheuchenzuber, Michael, Supervisory Procurement Analyst, Office of Procurement Management, Department of Commerce, Washington, D.C., Interview, June 1989.
15. Schstrom, Richard W., Acting Chief Director of Procurement and Grant Policy, Department of Labor, Washington, D.C., Interview, June 1989.
16. Shields, Mildred, Acquisition Management Services, Department of Veteran Affairs, Washington, D.C., Interview, May 1989.
17. Stevenson, Curtis N., Deputy for Defense Acquisition Council, Procurement Policy, Office of the Assistant Secretary of the Army, Research, Development and Acquisition, Washington, D.C., Interview, May 1989.
18. Tyckoski, James E., Director of Domestic Policy and Compliance in the Office of the Procurement Executive, Department of State, Washington, D.C., Interview, May 1989.
19. Ustad, Ida, Division Director, General Services Administration Policy, Office of General Services Administration Policy and Regulation, General Services Administration, Washington, D.C., Interview, May 1989.
20. Walker, Patricia J., Procurement Analyst, Deputy Assistant Secretary of Defense (Base Closures and Utilization Directorate), Washington, D.C., Interview, April 1989.

## APPENDIX B

### INTERVIEW QUESTIONNAIRE

1. What is the purpose, as you perceive it, of the award fee incentive?
2. Do you think the award fee incentive can be applied to fixed-price contracts?
3. If the award fee incentive is applied to a fixed-price contract what are its advantages?
4. If the award fee incentive is applied to a fixed-price contract what are its disadvantages?
5. Do you perceive the use of a fixed-price-award-fee hybrid contract as being authorized by the FAR?
6. Has your agency used a fixed-price-award-fee contract or the award fee with other types of fixed-price contracts?
7. If the award fee incentive is used in fixed-price contracts should the fee limitations associated with cost-reimbursement contracts apply?
8. If the award fee incentive is used in fixed-price contracts should the contract structure be similar or different than if used in a cost-reimbursement contract?
9. If the award fee incentive is applied to a fixed-price contract should the base fee objective in a cost-reimbursement structure apply to the fixed-price contract (Should the base profit range be limited to zero to three percent)?
10. In your opinion, does the language in the FAR concerning the award fee incentive sufficiently describe its use?
11. In your opinion, does the fact that the FAR does not recognize a fixed-price-award-fee contract limit its use in Federal procurement?
12. Should the FAR be changed to recognize the Fixed-price-award-fee contract as a specific type?

13. Should the term "fee" be applied when the award fee concept is used in fixed-price contracts? What terminology would you suggest?

## APPENDIX C

### PROPOSED CHANGES TO THE FEDERAL ACQUISITION REGULATION

#### 16.208 Fixed-price-award-fee contracts.

A Fixed-price-award-fee contract is a fixed-price contract that provides for a fee consisting of (a) a firm-fixed-price, (including any profit objective) fixed at inception of the contract, and (b) an award amount, based upon a judgmental evaluation by the Government, sufficient to provide motivation for excellence in contract performance. Fixed-price-award-fee contracts are covered in Subpart 16.4, Incentive Contracts. See 16.403-3 for a more complete description, discussion, limitations, and prescribed clauses concerning the application of these contracts.

#### 16.403-3 Fixed-price-award-fee contracts.

(a) Description. A fixed-price-award-fee contract is a fixed-price contract that provides for a price not subject to any adjustment on the basis of the contractor's cost experience in performing the contract and for a fee consisting of an award amount that the contractor may earn in whole or in part during performance and that is sufficient to provide motivation for excellence in such areas as quality, timeliness, technical ingenuity, and effective management. The amount of the award fee to be paid is determined by the Government's judgmental evaluation of the contractor's performance in terms of the criteria stated in the contract. This determination is made unilaterally by the Government and is not subject to the Disputes clause.

(b) Application. (1) The fixed-price-award-fee contract is suitable for use when--

(i) The work to be performed is such that it is neither feasible nor effective to devise predetermined objective incentive targets applicable to such areas as management, quality, performance or schedule;

(ii) The likelihood of meeting acquisition objectives will be enhanced by using a contract that effectively motivates the contractor toward exceptional performance and provides the Government with the flexibility to evaluate both actual performance and the conditions under which it was achieved;



(iii) Any additional administrative effort and cost required to monitor and evaluate performance are justified by the expected benefits; and

(iv) When the desired performance for the supplies or services required cannot be objectively measured or defined as contract-specific, but nevertheless are still a valuable condition of the contract.

(2) The number of evaluation criteria and the requirements they represent will differ widely among contracts. The criteria and rating plan should motivate the contractor to improve performance in the areas rated, but not at the expense of minimum acceptable performance in all other areas.

(3) Fixed-price-award-fee contracts shall, as a minimum, provide for:

(i) Total award fee available during the contract performance;

(ii) Evaluation criteria established prior to contract award and clarification that the criteria may change during the contract performance provided the contractor is notified in a reasonable time of the change;

(iii) Evaluations at stated intervals during performance, so that the contractor will periodically be informed of the quality of its performance and the areas in which improvement is expected;

(iv) Assignment of the Government's performance monitors that will evaluate the contractor's performance;

(v) Assignment of a Fee Determination Official (FDO) to be responsible for assessing the contractor's performance based upon the input from the Government monitors and determining the amount of award fee earned for each performance period; and

(vi) If the contracting office determines that the dollar value or complexity of the contract will require detailed evaluation, a Performance Evaluation Board (PEB) may be established.

(4) A portion of the award fee is allocated to each evaluation period. Payment of fee is based on the contractor's performance during the evaluation period. This can create an effective incentive by inducing the contractor to improve poor performance or to continue good performance. The contractor may earn the award fee in total, in part, or not at all.



(c) Limitations. No fixed-price-award-fee contract shall be awarded unless--

(1) The maximum award fee available is not greater than ten percent of the Government's estimated contract cost, excluding profit,

(2) The contract amount, performance period, and expected benefits are sufficient to warrant the additional administrative effort and cost involved.

(3) The determination and findings required by 16.403(c) has been signed.

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